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(54) **LINKABLE DIGITAL CAMERAS FOR AN IMAGE CAPTURE SYSTEM**

(75) Inventors: **Xuemei Zhang**, Mountain View, CA (US); **Yingmei Lavin**, Newark, CA (US)

(73) Assignee: **Hewlett-Packard Development Company, L.P.**, Houston, TX (US)

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Primary Examiner—Andrew Christensen
Assistant Examiner—Lin Ye
(74) *Attorney, Agent, or Firm*—Trueman H. Denny, III

(57) **ABSTRACT**

A system of linked digital cameras for an image capture system is disclosed. A first and second digital camera can be linked to capture a first images and a second image that are used to form a stereo image. A first data port on the first digital camera and a second data port on the second digital camera intercommunicate data between each other when the cameras are linked. The data can include the first and second image data, camera control data, and camera synchronization data. After capturing the first and second images, the image from one of the cameras can be transferred to the other camera so that both the first and second images reside in the other camera. The system allows a user who wishes to capture stereo images the ability to do so with out having to purchase two digital cameras. A compatible digital camera can be borrowed from another user for the purpose of stereo image capture. After the stereo image is captured, the user transfers both images to his camera and returns the borrowed camera. The cameras can be equipped with viewfinders that allow a user of the cameras to view the image being captured in stereo. The viewfinders can be adjustable to accommodate variations in user interpupillary distance. A digital camera operating system (OS) can be customized to enable stereo image capture, image data handling, image processing, and camera control for the linked digital cameras.

24 Claims, 7 Drawing Sheets